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# Time Sensitive Emergency System Standards Manual

State of Idaho

Authority: Sections 56-1024 through 56-1030, Idaho Code



Time Sensitive Emergency Council  
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## I. DEFINITIONS

The following terms are used in this manual as defined below:

**Heart Attack.** STEMI, which is a common name for ST-elevation myocardial infarction, a more precise definition for a type of heart attack that is caused by a prolonged period of blocked blood supply that affects a large area of the heart and has a substantial risk of death and disability calling for a quick response.

**Regional Time Sensitive Emergency (TSE) Committee.** A regional TSE committee established under Section 56-1027, Idaho Code.

**Stroke.** An interruption of blood flow to the brain causing paralysis, slurred speech and/or altered brain function usually caused by a blockage in a blood vessel that carries blood to the brain (ischemic stroke) or by a blood vessel bursting (hemorrhagic).

**Trauma.** The result of an act or event that damages, harms, or hurts a human being resulting in intentional or unintentional damage to the body resulting from acute exposure to mechanical, thermal, electrical or chemical energy, or from absence of such essentials as heat or oxygen.

**TSE Designated Center.** A facility that has voluntarily applied for TSE designation, met and is in compliance with the designation criteria and standards of these rules, and that the TSE Council has designated as one (1) or more of the following:

- a. Trauma
  - (1) Level I Trauma Center;
  - (2) Level II Trauma Center;
  - (3) Level III Trauma Center;
  - (4) Level IV Trauma Center;
  - (5) Level V Trauma Center;
  - (6) Pediatric Level I Trauma Center; or
  - (7) Pediatric Level II Trauma Center.
- b. Stroke
  - (1) Level I Stroke Center (Comprehensive);
  - (2) Level II Stroke Center (Primary); or
  - (3) Level III Stroke Center (Acute Stroke Ready).
- c. STEMI (Heart Attack)
  - (1) Level I STEMI Center (Receiving); or
  - (2) Level II STEMI Center (Referring).

**Facility.** A health care organization that is voluntarily seeking designation from the Idaho Time Sensitive Emergency Council.

**Center.** A facility designated by the Idaho Time Sensitive Emergency Council is known as a center.

**Freestanding Emergency Department.** Is owned by a hospital with a dedicated emergency department; is located within 35 miles of the hospital that owns or controls it; provides emergency services twenty-four (24) hours per day, seven (7) days per week on an outpatient basis; is physically separate from a hospital; and meets the staffing and service requirements in IDAPA 16.03.14, "Rules and Minimum Standards for Hospitals in Idaho."

**Hospital.** As defined in Section 39-1301, Idaho Code, is a facility which is primarily engaged in providing, by or under the daily supervision of physicians: concentrated medical and nursing care on a twenty-four (24) hour basis to inpatients experiencing acute illness; diagnostic and therapeutic services for medical diagnosis and treatment, psychiatric diagnosis and treatment, and care of injured, disabled, or sick persons; rehabilitation services for injured, disabled, or sick persons; obstetrical care; provides for care of two (2) or more individuals for twenty-four (24) or more consecutive hours; and is staffed to provide nursing professional nursing care on a twenty-four (24) hour basis.

**Rural Clinic.** A health care clinic in a rural area that is located more than thirty-five (35) miles from a hospital via maintained roads and is capable of providing emergency care to patients.

## II. TSE STANDARDS MANUAL AUTHORITY

The Idaho Time Sensitive Emergency System Council is authorized under Section 56-1028, Idaho Code, to promulgate rules for the purpose of establishing standards and for the administration of a voluntary time sensitive emergency system of care.

## III. REFERENCED DOCUMENTS

- American College of Surgeons, Resources for the Optimal Care of the Injured Patient, 2006
- Society of Cardiovascular Patient Care, Chest Pain Cycle 4 Accreditation
- Society of Cardiovascular Patient Care, Chest Pain v5 Accreditation, 2015
- DNV Healthcare, Inc. Primary Stroke Center Certification Standards
- DNV Healthcare, Inc. Comprehensive Stroke Center Certification Standards
- Joint Commission, Advanced Disease Specific Care Manual, Current Edition

## IV. TSE REGIONS

### TSE Regions

There are six TSE regions.

- **Region 1 – North.** The counties of Benewah, Bonner, Boundary, Kootenai, Latah, and Shoshone.
- **Region 2 – North Central.** The counties of Clearwater, Idaho, Latah, Lewis and Nez Perce.
- **Region 3 – Southwest.** The counties of Ada, Adams, Boise, Canyon, Elmore, Gem, Owyhee, Payette, Valley, and Washington.
- **Region 4 – South Central.** The counties of Blaine, Camas, Cassia, Gooding, Jerome, Lincoln, Minidoka, and Twin Falls.

- **Region 5 – Southeast.** The counties of Bannock, Bear Lake, Bingham, Caribou, Cassia, Franklin, Minidoka, Oneida, and Power.
- **Region 6 – East.** The counties of Bingham, Bonneville, Butte, Clark, Custer, Fremont, Jefferson, Lemhi, Madison, and Teton.

The specific procedures to request realignment of regions can be found section 81 of the Rules of the Idaho Time Sensitive Emergency System Council. Refer to Section 56-1030, Idaho Code for detailed description of the Regional TSE Committee functions.

## V. APPLICATION PROCESS

### General Information

A facility applying for initial designation as a TSE designated facility must apply for each designation by:

- Submitting a completed application for each designation being sought to the TSE Program via the Bureau of EMS and Preparedness;
- Submitting a non-refundable TSE site survey fee as applicable to the TSE Program; and
- Scheduling a site survey as applicable.

The TSE Council, upon review of appropriate documentation, may provide reciprocity for facilities in Idaho that also choose to operate under a designation in a neighboring state's system.

### Fees

The designation fees are for a three (3) year designation and are payable on an annual basis.

	<b>Designation Fee 3-years/Annual (Not to exceed)</b>	<b>TSE On-Site Survey Fee (Not to exceed)</b>
<b>Trauma Designations</b>		
Level I	\$45,000/\$15,000	\$3,000 (Not applicable if using ACS verification)
Level II	\$36,000/\$12,000	\$3,000 (Not applicable if using ACS verification)
Level III	\$24,000/\$8,000	\$3,000 (Not applicable if using ACS verification)
Level IV	\$12,000/\$4,000	\$1,500 (Not applicable if using ACS verification)
Level V	\$3,000/\$1,000	\$1,500
Pediatric Level I and Level II	\$36,000/\$12,000	Not applicable because of ACS verification
<b>Stroke Designations</b>		
Level I	\$21,000/\$7,000	\$3,000 (Not applicable if using national verification)
Level II	\$12,000/\$4,000	\$3,000 (Not applicable if using national verification)
Level III	\$1,500/\$500	\$3,000
<b>STEMI Designations</b>		
Level I	\$21,000/\$7,000	\$3,000 (Not applicable if using national verification)
Level II	\$1,500/\$500	\$3,000



## Site Survey

An Idaho TSE site survey may include:

- A review of the facility's application;
- A chart review based on the facility's application;
- A review of the facility's QI process;
- An inspection of equipment pertaining to the designation being sought;
- A review of policies and procedures pertaining to the designation being sought;
- A physical inspection of the facility;
- Interviews with facility staff and review of staff credentials;
- A review of the facility's protocols and call schedules;
- A review of transfer protocols; and
- A review of the facility's planned interaction with prehospital transport.

## Survey Team

A TSE Council approved site survey team may include:

A physician reviewer who:

- Is certified by the American Board of Medical Specialties or the American Board of Osteopathic Medicine;
- Is board-certified in the specialty area he/she is representing on the review team;
- Is currently active in trauma, stroke or emergency cardiac care at a center that is at or above the level being reviewed;
- Is from out-of-state (for Level I Trauma Centers, Level II Trauma Centers, Level I STEMI Centers, and Level I Stroke Centers);
- Is from outside of the region of the center being verified; and
- Has no conflict of interest with the center under review.

Nurse Reviewer and/or Program Manager who:

- Is currently active in trauma, stroke or emergency cardiac care at a center that is at or above the level being reviewed;
- Is from out-of-state (for Level I Trauma Centers, Level II Trauma Centers, Level I STEMI Centers, and Level I Stroke Centers);
- Is from outside of the region of the center being verified; and
- Has no conflict of interest with the center under review.

The procedures to notify the TSE Council of a potential conflict of interest with a specific reviewer can be found in section 251 of the Rules of the Idaho Time Sensitive Emergency System Council.



## Provisional Designation, Waiver, Denial, Modification, Revocation and Suspension

Procedures for applying for a waiver or for submitting an appeal can be found in the TSE Rules, sections 270-285.

## VI. TRAUMA DESIGNATION

### Level I, II, III & Level IV

Hospitals seeking Level I, II, III or Level IV trauma designation have the choice to use the ACS or the State of Idaho to verify their compliance.

To apply for Level I, II, III or Level IV using the ACS to verify compliance, the following is required:

- A completed application;
- A copy of the pre-review questionnaire (PRQ) from the ACS; and
- A copy of the ACS site survey report.

To apply for Level I, II, III or Level IV using the Idaho TSE Council to verify compliance, the following is required:

- A completed application;
- A non-refundable site survey fee; and
- A scheduled site survey.

A hospital applying for initial designation using the Idaho TSE Council to verify compliance must have a TSE Council-approved survey team evaluation prior to initial designation. The hospital must meet or exceed the designation criteria in Appendix A.

Once verified by the ACS or the Idaho TSE Council, the center will be designated for three (3) years, unless the designation is rescinded by the TSE Council for non-compliance to the TSE Council's rules. If the facility has been verified by the ACS and is transitioning to a state designation, the designation period and fees will be prorated to correspond to the ACS verification expiration date. The applicant facility must then pay either the annual designation fee or the entire prorated designation fee. After designation notification and upon the Department's receipt of the designation fee, designation is effective. The TSE Council will send a certificate of designation and confirmation of the designation period. Annual designation fees for those facilities paying yearly are due to the Department within thirty (30) days of the date of the invoice in order to maintain designation.

Any TSE-designated center that has a loss of certification or licensure will immediately notify the TSE Council by contacting TSE Program staff.

A TSE-designated Level I, II, III or Level IV Trauma Center requesting renewal of their designation must:

- Submit a renewal application six months prior to the expiration date of the previous designation; **and**
- Submit a TSE site survey fee, if applicable; **and**
- Submit a copy of the full ACS report detailing the results of the ACS site visit; **or**
- Schedule a site visit from a TSE Council-approved survey team.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

## Level V

A hospital, free standing emergency department, or rural clinic seeking Level V Trauma designation must undergo the Idaho TSE Council verification to demonstrate compliance with the standards incorporated by the TSE Council.

To apply for Level V, the facility must:

- Submit a completed application;
- Submit the TSE site survey fee; and
- Schedule a site survey.

A facility applying for initial designation must have a TSE Council approved survey team evaluation prior to initial designation as an Idaho TSE Level V Trauma Center. The facility must meet or exceed the designation criteria in Appendix A.

Once verified, the center will be designated for three (3) years, unless the designation is rescinded by the TSE Council for non-compliance with the rules and/or standards. The designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) for any reason will immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Level V Trauma Center requesting renewal of their designation must:

- Submit a renewal application at least six months prior to the expiration date of the previous designation;
- Submit TSE site survey fee; and
- Schedule a site visit from a TSE Council approved survey team.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

## Pediatric Trauma

Hospitals seeking Pediatric Level I or II Trauma Center designation must undergo the American College of Surgeons' (ACS) verification to demonstrate compliance with the corresponding standards published in the ACS document *Resources for Optimal Care of the Injured Patient, 2006 or 2015* as applicable.

To apply for Pediatric Level I or II Trauma Center designation, the following is required:

- A completed application;
- A copy of the pre-review questionnaire (PRQ) submitted to the ACS; and
- A copy of the ACS site survey.

Once verified by the ACS and approved by the TSE Council, the center will be designated for three (3) years unless the designation is rescinded by the TSE Council for non-compliance with the TSE Council's rules.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) for any reason will immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Pediatric Level I or II Trauma Center requesting renewal of their designation must:

- Submit a renewal application;
- Be verified by the ACS three (3) months prior to the expiration date of previous designation; and
- Submit a copy of the full ACS report detailing the results of the ACS site visit.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

## **VII. STROKE DESIGNATION**

### **Level I & II Stroke Center (Comprehensive & Primary)**

Hospitals seeking Level I Stroke Center designation have the choice to use DNV, Joint Commission, or the State of Idaho to verify their compliance.

To apply as a Level I Stroke Center, using the DNV or Joint Commission, the following is required:

- A completed application; and
- A copy of the full accreditation report detailing the results of the site visit results from the national accrediting body.

To apply as a Level I Stroke Center using the Idaho TSE Council to verify compliance, the hospital must:

- Submit a completed application;
- Submit a non-refundable site survey fee; and
- Schedule a site survey.

A hospital applying for initial designation using the Idaho TSE Council to verify compliance must have a TSE Council approved survey team evaluation prior to initial designation. The hospital must meet or exceed the designation criteria in Appendix A.

Upon verification, the center will be designated for three (3) years. The designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) must immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Level I Stroke Center requesting renewal of their designation must:

- Submit a renewal application six (6) months prior to the expiration date of the previous designation;
- Submit a site survey fee, if applicable; and
- Satisfy one of the following:
  - Be re-accredited by a national accrediting body three (3) months prior to the expiration date of the previous designation; and submit a copy of the full accrediting body report detailing the results of the site visit or a letter from the accrediting body stating the reasons for delay; or
  - Schedule a site visit from a TSE Council approved survey team.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

### **Level III Stroke Center (Acute Stroke Ready)**

A hospital, free standing emergency department, or rural clinic seeking Level III Stroke Center designation must undergo verification by a TSE Council approved survey team and demonstrate compliance with the standards incorporated by the TSE Council.

To apply as a Level III Stroke Center, a facility must:

- Submit a completed application;
- Schedule a site visit by a TSE Council approved survey team; and
- Submit a TSE site survey fee.

A facility applying for initial designation must have a TSE Council approved survey team evaluation prior to initial designation as an Idaho TSE Level III Stroke Center. The facility must meet or exceed the designation criteria in Appendix A.

Upon verification, the center will be designated for three (3) years. The designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) will immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Level III Stroke Center requesting renewal of their designation must:

- Submit a renewal application six (6) months prior to the expiration date of the previous designation;
- Submit a TSE site survey fee; and
- Schedule a site visit from a TSE Council approved survey team.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

## VIII. STEMI DESIGNATION

### Level I STEMI Center (Receiving)

A hospital seeking designation as Level I STEMI Center has the choice to use the Society of Cardiovascular Patient Care to verify compliance with Chest Pain v5 accreditation standards or the State of Idaho to verify compliance with standards incorporated by the TSE Council.

To apply as a Level I STEMI Center using the Society of Cardiovascular Patient Care, a hospital must:

- Submit a completed application; and
- Submit a copy of the full accreditation report detailing the results of the site visit results from the Society of Cardiovascular Patient Care.

To apply as a Level I STEMI Center using the Idaho TSE Council to verify compliance, a hospital must:

- Submit a completed application;
- Submit a non-refundable site survey fee; and
- Schedule a site survey.

A hospital applying for initial designation using the Idaho TSE Council to verify compliance must have a TSE Council approved survey team evaluation prior to initial designation. The hospital must meet or exceed the designation criteria in Appendix A.

Upon verification, the facility will be designated for three (3) years. The designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) will immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Level I STEMI Center requesting renewal of their designation must:

- Submit a renewal application six (6) months prior to the expiration date of the previous designation; and
- Submit a copy of the full accrediting body report detailing the results of the site visit from the Society of Cardiovascular Patient Care; or

- Schedule a site survey by a TSE Council approved survey team and submit a non-refundable site survey fee.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

### **Level II STEMI Center (Referring)**

A hospital, free standing emergency department, or rural clinic seeking Level II STEMI Center designation must undergo verification by the Idaho TSE Council to demonstrate compliance with standards incorporated by the TSE Council.

To apply as a Level II STEMI Center, the facility must:

- Submit a completed application;
- Schedule a site survey by a TSE Council approved survey team; and
- Submit a non-refundable TSE site survey fee.

Upon verification, the facility will be designated for three (3) years. The designation fee for year one must be paid prior to receipt of the designation from the TSE Council.

Any TSE designated center that has a loss of certification or licensure (by the Joint Commission or State of Idaho) will immediately notify the TSE Council by contacting TSE Program staff.

A TSE designated Level II STEMI Center requesting renewal of their designation must:

- Submit a renewal application six (6) months prior to the expiration date of the previous designation;
- Submit a TSE site survey fee; and
- Schedule a site visit from a TSE Council approved survey team.

Designation will not lapse due to a delay in scheduling the site visit if the delay is through no fault of the facility.

## IX. APPENDIX A: DESIGNATION REQUIREMENTS

### Level I Trauma Center

#### Designation Criteria for Level I Trauma Center

Criteria for designation of Level I Trauma Centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*. The criteria defined in that document are designed to verify that the services and systems are in place to ensure optimal care of the trauma patient. The following elements must be met for designation as a Level I Trauma Center in Idaho.

Criteria Element
<b>1. Trauma Systems</b>
1.1 There is sufficient involvement by the hospital trauma program staff in state and regional trauma system planning, development, and operation.
<b>2. Description of Trauma Centers and Their Roles in a Trauma System</b>
2.1 All trauma facilities are on the same campus.
2.2 The Level I Trauma Center meets admission volume performance requirements.
2.3 The trauma director has the responsibility and authority for determining each general surgeon's ability to participate on the trauma panel through the trauma Performance Improvement Patient Safety (PIPS) program and hospital policy.
2.4 A general surgeon or appropriate substitute is available for major resuscitations in house 24/7.
2.5 The PIPS program has defined conditions requiring the surgeon's immediate hospital presence.
2.6 The 80% compliance of the surgeon's presence in the ED is confirmed and monitored by PIPS (30 minutes).
2.7 The trauma surgeon on call is dedicated to the trauma center while on duty.
2.8 A published backup call schedule for trauma surgery is available.
2.9 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.10 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.11 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
<b>3. Prehospital Trauma Care</b>
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma surgeon is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
<b>4. Interhospital Transfer</b>
4.1 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.
4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient.
4.3 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.



## 5. Hospital Organization and the Trauma Program

- 5.1 The hospital has the commitment of the institutional governing body and the medical staff to become a trauma center.
- 5.2 There is a current resolution supporting the trauma center from the hospital board.
- 5.3 There is a current resolution supporting the trauma center from the medical staff.
- 5.4 The multidisciplinary trauma program continuously evaluates its process and outcomes to insure optimal and timely care.
- 5.5 The trauma medical director is a board-certified surgeon or an ACS Fellow.
- 5.6 The trauma medical director participates in trauma call.
- 5.7 The trauma director is current in ATLS.
- 5.8 The trauma director is both a member and an active participant in a national or regional trauma organization.
- 5.9 The trauma director has the authority to correct deficiencies in trauma care or to exclude from trauma call the trauma team members who do not meet specified criteria.
- 5.10 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
- 5.11 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
- 5.12 Seriously injured patients are admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers.
- 5.13 There is sufficient infrastructure and support to the trauma service to ensure adequate provision of care.
- 5.14 In teaching facilities, the requirements of the Residency Review Committee are met.
- 5.15 The trauma program manager shows evidence of educational preparation (a minimum of 16 hours of trauma-related continuing education per year) and clinical experience of injured patients.
- 5.16 There is a multidisciplinary peer review committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
- 5.17 Adequate (>50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
- 5.18 The core group is adequately defined by the trauma medical director.
- 5.19 The core group takes at least 60% of the total trauma call hours each month.
- 5.20 The trauma director ensures and documents dissemination of information and findings from the peer review meetings to the noncore surgeons on the trauma call panel.
- 5.21 There is a Trauma Program Operational Process Performance Improvement Committee.

## 6. Clinical Functions: General Surgery

- 6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements.
- 6.2 The general surgeon is board-certified or meets the Alternate Pathway\* or is an ACS Fellow.
- 6.3 The trauma surgeon has privileges in general surgery.
- 6.4 The trauma surgeon on call is dedicated to the trauma center while on duty.
- 6.5 A published backup call schedule for trauma surgery is available.
- 6.6 An attendance threshold of 80% is met for trauma surgeon presence in the ED.
- 6.7 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.
- 6.8 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.





6.9 There is a multidisciplinary peer review committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.10 Adequate (at least 50%) attendance by general surgery (core group) at the multidisciplinary peer review committee is documented.
6.11 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
6.12 The trauma medical director has documented 16 hours annually or 48 hours in three years of verifiable, external trauma related CME.
6.13 Other trauma surgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME or an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
6.14 The trauma medical director is a member and participates in regional or national trauma organizations.
<b>7. Clinical Functions: Emergency Medicine</b>
7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
7.2 ED physicians are present in the ED at all times.
7.3 In institutions in which there are emergency medicine residency training programs, supervision is provided by an in-house attending emergency physician 24 hours per day.
7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the director of trauma services.
7.5 An emergency physician is board-certified or meets the Alternate Pathway*.
7.6 Emergency physicians on the call panel are regularly involved in the care of injured patients.
7.7 A representative from the ED participates in the prehospital PIPS program.
7.8 A designated emergency physician is available to the trauma director for PIPS issues that occur in the ED.
7.9 There is emergency physician participation with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee (dealing with systems issues).
7.10 The emergency medicine representative or designee to the multidisciplinary peer review committee attends a minimum of 50% of these meetings.
7.11 The emergency physician liaison representative has the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
7.12 Other emergency physicians who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
7.13 There are emergency physicians who have successfully completed the ATLS course.
7.14 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.
<b>8. Clinical Functions: Neurosurgery</b>
8.1 A neurosurgical liaison is designated.
8.2 Neurotrauma care is promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.
8.3 The hospital provides an on-call neurosurgical backup schedule with formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed.
8.4 There is a PIPS review of all neurotrauma patients who are diverted or transferred.



8.5 An attending neurosurgeon is promptly available to the hospital's trauma service when the neurosurgical consultation is requested.
8.6 The neurosurgeons that care for trauma patients are board-certified or meet the Alternate Pathway*.
8.7 Qualified neurosurgeons are regularly involved in the care of head- and spinal cord- injured patients and are credentialed by the hospital with general neurosurgical privileges.
8.8 The neurosurgery service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
8.9 The neurosurgeon representative attends a minimum of 50% of the multidisciplinary peer review committee meetings.
8.10 The neurosurgeon liaison representative has the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
8.11 Other neurosurgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
<b>9. Clinical Functions: Orthopedic Surgery</b>
9.1 Physical and occupational therapists and rehabilitation specialists are present.
9.2 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.3 A mechanism to ensure operating room availability without undue delay for patients with semi urgent orthopedic injuries.
9.4 There is an orthopedic surgeon who is identified as the liaison to the trauma program.
9.5 Plastic surgery, hand surgery, and spinal injury care capabilities are present.
9.6 Orthopedic team members have dedicated call at their institution and a backup call system.
9.7 An orthopedic team member is promptly available in the trauma resuscitation area when consulted by the surgical trauma team leader for multiple injured patients.
9.8 The design of the backup call system, the responsibility of the orthopedic trauma liaison, has been approved by the trauma program director.
9.9 Provide sufficient resources, including instruments, equipment, and personnel, for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures.
9.10 The orthopedic service participates actively with the overall trauma PIPS program and the Trauma Program Operational Process Performance Committee.
9.11 The orthopedic trauma liaison or representative attends a minimum of 50% of the multidisciplinary peer review meetings.
9.12 Orthopedic surgeons who care for injured patients are board-certified or meet the Alternate Pathway*.
9.13 The orthopedic surgeon has privileges in general orthopedic surgery.
9.14 The orthopedic surgical liaison to the trauma program has documented at least 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
9.15 The orthopedic trauma team member has documentation of the acquisition of 16 hours of CME per year on average and has participated in an internal educational process conducted by the trauma program and the orthopedic liaison based on the principles of practice-based learning and the PIPS program.



<b>11. Collaborative Clinical Services</b>	
<b>Anesthesia</b>	
11.1	Anesthesia services are promptly available for emergency operations.
11.2	Anesthesia services are promptly available for airway problems.
11.3	There is an anesthesiologist liaison designated to the trauma program.
11.4	Anesthesia services are available in-house 24 hours a day.
11.5	When anesthesiology chief residents or CRNAs are used to fulfill availability requirement, the staff anesthesiologist on call is (1) advised, (2) promptly available at all times, and (3) present for all operations.
11.6	The availability of the anesthesia services and the absence of delays in airway control or operations are documented in the hospital PIPS process.
11.7	All anesthesiologists taking call have successfully completed a residency program.
11.8	The anesthesia liaison is identified.
11.9	The anesthesia representative participates in the trauma PIPS program.
11.10	The anesthesia representative or designee to the trauma program attends at least 50% of the multidisciplinary peer review meetings.
<b>Operating Room</b>	
11.11	The operating room is adequately staffed and immediately available.
11.12	The operating room team does not have functions requiring its presence outside the operating room.
11.13	There is a mechanism for providing additional staff for a second operating room when the first operating room is occupied.
11.14	The operating room has the essential equipment.
11.15	Trauma centers have the necessary equipment for a craniotomy.
11.16	The trauma center has cardiopulmonary bypass and an operating microscope available 24 hours per day.
<b>Post anesthesia Care Unit (PACU)</b>	
11.17	The PACU has qualified nurses available 24 hours per day as needed during the patient's post anesthesia recovery phase.
11.18	The PACU is covered by a call team from home with documentation by the PIPS program that nurses are available and delays are not occurring.
11.19	The PACU has the necessary equipment to monitor and resuscitate patients.
11.20	The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
<b>Radiology</b>	
11.21	Radiologists are promptly available, in person or by teleradiology, when requested, for the interpretation of radiographs, performance of complex imaging studies, or interventional procedures.
11.22	Diagnostic information is communicated in a written form and in a timely manner.
11.23	Critical information is verbally communicated to the trauma team.
11.24	Final reports accurately reflect communications, including changes between preliminary and final interpretations.
11.25	Changes in interpretation are monitored by the PIPS program.
11.26	There is at least one radiologist appointed as liaison to the trauma program.
11.27	Radiology participates in the trauma PIPS program by at least being involved in the protocol development and trend analysis that relate to diagnostic imaging.



11.28 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transportation to and while in the radiology department.
11.29 Conventional radiography and CT are available 24 hours per day.
11.30 There is an in-house radiographer.
11.31 There is an in-house CT technologist.
11.32 Conventional catheter angiography and sonography are available 24 hours per day.
11.33 MRI capability is available 24 hours per day.
11.34 The PIPS program documents the appropriate timeliness of the arrival of the MRI technologist.
<b>Critical Care</b>
11.35 There is a surgically directed ICU physician team.
11.36 The surgical director or co-director of the ICU has appropriate training and experience for the role.
11.37 The trauma surgeon remains in charge of patients in the ICU.
11.38 Physician coverage of critically ill trauma patients is available 24 hours per day.
11.39 Physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise.
11.40 The surgical director of the ICU has obtained critical care training during residency or fellowship and has expertise in perioperative and post-injury care of injured patients.
11.41 The surgical director of the ICU has added qualifications in surgical critical care from the American Board of Surgery or meets the Alternate Pathway* for critical care.
11.42 The trauma service retains responsibility for patients and coordinates all therapeutic decisions appropriate for its level.
11.43 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
11.44 The center has in-house physician coverage for ICU at all times.
11.45 A qualified nurse is available 24 hours a day to provide care during the ICU phase.
11.46 The patient/nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
11.47 The ICU has the necessary equipment to monitor and resuscitate patients.
11.48 Intracranial pressure monitoring equipment is available.
<b>Other Surgical Specialists</b>
11.49 The Level I facility has available a full spectrum of specialists.
<b>Medical Consultants</b>
11.50 The trauma center includes the following medical specialists: cardiology, infectious disease, pulmonary medicine, and nephrology and their respective support teams (for example, respiratory therapy, dialysis team, and nutrition support).
11.51 A respiratory therapist is available to care for trauma patients 24 hours per day.
11.52 Acute hemodialysis is available.
11.53 Laboratory services are available 24 hours per day for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
11.54 The blood bank is capable of blood typing and cross-matching.
11.55 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.
11.56 The capability for coagulation studies, blood gases, and microbiology are present.
<b>12. Rehabilitation</b>
12.1 The hospital has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.



12.2 The hospital has physical therapy services.
12.3 The hospital has social services.
12.4 The hospital has occupational therapy services.
12.5 The hospital has speech therapy services.
12.6 Rehabilitation consulting services, occupational therapy, speech therapy, physical therapy, and social services are available during the acute phase of care.
<b>15. Trauma Registry</b>
15.1 Trauma registry data are collected and analyzed.
15.2 Data is submitted to the Idaho TSE Registry.
15.3 The trauma center uses the registry to support its PIPS program.
15.4 The trauma registry has at least 80% of the trauma cases entered within 180 days of treatment.
15.5 The trauma program ensures that trauma registry confidentiality measures are in place.
15.6 There are strategies for monitoring data validity for the trauma registry.
<b>16. Performance Improvement and Patient Safety (PIPS)</b>
16.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.
16.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
16.3 The program is able to demonstrate that the trauma registry supports the PIPS process.
16.4 The process of analysis includes multidisciplinary review.
16.5 The process of analysis occurs at regular intervals to meet the needs of the program.
16.6 The results of analysis define corrective strategies.
16.7 The results of analysis and corrective strategies are documented.
16.8 The trauma program is empowered to address issues that involve multiple disciplines.
16.9 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
16.10 The trauma program has a medical director with the authority and administrative support to lead the program.
16.11 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
16.12 The trauma director has the authority to recommend changes for the trauma panel based on performance review.
16.13 Identified problem trends undergo multidisciplinary peer review by the Trauma Peer Review Committee.
16.14 The trauma center is able to separately identify the trauma patient population for review.
16.15 There is a process to address trauma program operational issues.
16.16 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
16.17 The process identifies problems.
16.18 The process demonstrates problem resolution (loop closure).
16.19 There is a trauma multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
16.20 The attendance by the trauma medical director and the specialty representatives is greater than 50%.
16.21 The core general surgeon attendance at the trauma peer review committee is greater than 50%.



16.22 In circumstances when attendance is not mandated (noncore members) the trauma medical director ensures dissemination of information from the trauma peer review committee.
16.23 The trauma medical director documents the dissemination of information from the trauma peer review committee.
16.24 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
16.25 Deaths are systematically categorized as preventable, non-preventable, or potentially preventable.
16.26 When a consistent problem or inappropriate variation is identified, corrective actions are taken and documented.
<b>17. Outreach and Education</b>
17.1 The trauma center is engaged in public and professional education.
17.2 The trauma center does provide some means of referral and access to trauma center resources.
17.3 The trauma center is involved in prevention activities, including public education activities.
17.4 The Level I Trauma Center provides an ATLS course at least annually.
17.5 The Level I Trauma Center provides a continuous rotation in trauma surgery for senior residents that is part of an Accreditation Council for Graduate Medical Education- accredited program in any of the following disciplines: general surgery, orthopedic surgery, or neurosurgery; and supports an acute care surgery fellowship consistent with the educational requirements of the American Association for the Surgery of Trauma.
17.6 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.
17.7 All general surgeons and emergency medical physicians on the trauma team have successfully completed the ATLS course at least once.
17.8 The trauma director and the liaison representatives from neurosurgery, orthopedic surgery, and emergency medicine have accrued an average of 16 hours annually or 48 hours in 3 years of external trauma-related CME.
17.9 Other general surgeons, neurosurgeons, orthopedic surgeons, and emergency medicine specialists who take trauma call have acquired 16 hours of CME per year on average or participated in an internal educational process.
<b>18. Prevention</b>
18.1 The trauma center participates in injury prevention.
18.2 The trauma center has a prevention coordinator with a demonstrated job description and salary support.
18.3 The trauma center demonstrates the presence of prevention activities that center on priorities based on local data.
18.4 The trauma center demonstrates collaboration with or participation in national, regional, or state programs.
18.5 The trauma center has the capability to provide intervention or referral for patients identified as problem drinkers.
<b>19. Trauma Research and Scholarship</b>
19.1 The Level I trauma center meets the minimum 20 peer-reviewed articles published in journals included in <i>Index Medicus</i> in 3 years or the criterion of 4 of 7 scholarly activities listed in chapter 19 ( <i>Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006</i> ) and 10 peer-reviewed articles published in journals included in <i>Index Medicus</i> in 3 years.
19.2 The research resulted from work related to the trauma center.



19.3 The articles include authorship or co-authorship by a member of the general surgical team.
19.4 Of the 20 articles, there is at least one that includes authorship or co-authorship by members of the general surgery team and at least one each from 3 of 6 disciplines: neurosurgery, emergency medicine, orthopedics, radiology, anesthesia, and rehabilitation.
19.5 The trauma center meets the alternative criteria for research: 10 peer-reviewed articles published in journals included in <i>Index Medicus</i> resulting from work in the trauma center with at least one each from 3 of 6 disciplines (neurosurgery, emergency medicine, orthopedics, radiology, anesthesia, and rehabilitation); AND 4 of 7 scholarly activities as stated in Chapter 19 ( <i>Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006</i> ), Trauma Research and Scholarship.
19.6 The administration of the trauma center demonstrates support of the research program.
<b>20. Disaster Planning and Management</b>
20.1 The hospital meets the disaster-related requirements of the Joint Commission.
20.2 A trauma panel surgeon is a member of the hospital's disaster committee.
20.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.
20.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.
<b>21. Organ Procurement Activities</b>
21.1 The trauma center has an established relationship with a recognized organ procurement organization (OPO).
21.2 There are written policies for triggering notification of the OPO.
21.3 The PIPS process reviews the organ donation rate.
21.4 The center has written protocols for declaration of brain death.

\*Specific requirements to satisfy “Alternate Pathway” can be found in *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*.



## Designation Criteria for Level II Trauma Center

Idaho criteria for designation of Level II Trauma Centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*. The criteria defined in that document are designed to verify that the services and systems are in place to ensure optimal care of the trauma patient. The following elements must be met for designation as a Level II Trauma Center in Idaho.

Criteria Element
<b>1. Trauma Systems</b>
1.1 There is sufficient involvement by the hospital trauma program staff in state and regional trauma system planning, development, and operation.
<b>2. Description of Trauma Centers and Their Roles in a Trauma System</b>
2.1 All trauma facilities are on the same campus.
2.2 The trauma medical director has the responsibility and authority to determine each general surgeon's ability to participate on the trauma team through the trauma Performance Improvement and Patient Safety (PIPS) program and hospital policy.
2.3 The PIPS program has defined conditions requiring the surgeon's immediate hospital presence.
2.4 The trauma surgeon is on site in the Emergency Department (ED) within 30 minutes of notification 24/7 with an achievement rate of 80% as monitored by the PIPS program.
2.5 The trauma surgeon on call is dedicated to the trauma center while on duty.
2.6 A schedule for call and backup call for trauma surgery is published and available.
2.7 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.8 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.9 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
<b>3. Prehospital Trauma Care</b>
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma Surgeon on call is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
<b>4. Interhospital Transfer</b>
4.1 A mechanism for direct physician-to-physician contact is present for arranging patient transfer.
4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient.
4.3 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.
<b>5. Hospital Organization and the Trauma Program</b>
5.1 The Trauma Program Operational Process Performance Committee continuously evaluates its process and outcomes to ensure optimal and timely care.
5.2 The trauma medical director is a board-certified surgeon or an American College of Surgeons (ACS) Fellow.



5.3 The trauma medical director participates in trauma call.
5.4 The trauma medical director is current in Advanced Trauma Life Support (ATLS).
5.5 The trauma medical director is both a member and an active participant in national or regional trauma organizations.
5.6 The trauma medical director has the authority to correct deficiencies in trauma care or to exclude from trauma call the trauma team members who do not meet specified criteria.
5.7 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
5.8 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
5.9 Seriously injured patients are admitted to or evaluated by an identifiable surgical service staffed by credentialed trauma providers.
5.10 In teaching facilities, the requirements of the Residency Review Committee are met.
5.11 The trauma program manager has clinical experience caring for injured patients and a minimum of 16 hours of trauma-related continuing education per year.
5.12 There is a Trauma Program Operational Process Performance Committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
5.13 The general surgery core group is defined by the trauma medical director.
5.14 The general surgery core group takes at least 60% of the total trauma call hours each month.
5.15 The general surgery core group attends a minimum of 50% of the Trauma Program Operational Process Performance Committee meetings.
5.16 The trauma medical director ensures and documents dissemination of information and findings from the Trauma Program Operational Process Performance Committee meetings to the noncore surgeons on the trauma team.
5.17 There is a Trauma Program Operational Process Performance Improvement Committee. This multidisciplinary committee addresses, assesses, and corrects global trauma program and system issues. The committee handles process, includes all program-related services, meets regularly, takes attendance, has minutes, and works to correct overall program deficiencies to continue to optimize patient care.
<b>6. Clinical Functions: General Surgery</b>
6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements.
6.2 The general surgeon is board-certified, meets the Alternate Pathway*, or is an ACS Fellow.
6.3 The trauma surgeon has privileges in general surgery.
6.4 The trauma surgeon is present in the ED within 30 minutes of notification 24/7 with an 80% achievement rate as monitored by the PIPS program.
6.5 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.
6.6 There is a Trauma Program Operational Process Performance Committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.7 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
6.8 Surgeons who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related continuing medical education (CME) or an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.



## 7. Clinical Functions: Emergency Medicine

- 7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
- 7.2 Emergency physicians cover in-house emergencies with a PIPS process demonstrating the efficacy of this practice.
- 7.3 In institutions in which there are emergency medicine residency training programs, supervision is provided by an in-house attending emergency physician 24/7.
- 7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the director of trauma services.
- 7.5 Each emergency physician is board-certified or meets the Alternate Pathway\*.
- 7.6 A representative from the ED participates in the prehospital PIPS program.
- 7.7 A designated emergency physician is available to the trauma director for PIPS issues that occur in the ED.
- 7.8 An emergency physician participates in the trauma PIPS program and the Trauma Program Operational Process Performance Committee.
- 7.9 The emergency medicine representative or designee to the Trauma Program Operational Process Performance Committee attends a minimum of 50% of these meetings.
- 7.10 The emergency physician liaison representative has the documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME.
- 7.11 Emergency physicians who take trauma call have the documented 16 hours annually or 48 hours in 3 years of trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
- 7.12 All emergency physicians have successfully completed the ATLS course at least once.
- 7.13 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.

## 8. Clinical Functions: Neurosurgery

- 8.1 A neurosurgeon is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The neurosurgeon attends a minimum of 50% of these meetings.
- 8.2 Neurotrauma care is promptly and continuously available for severe traumatic brain injury and spinal cord injury and for less severe head and spine injuries when necessary.
- 8.3 The hospital provides an on-call neurosurgical backup schedule with formally arranged contingency plans in case the capability of the neurosurgeon, hospital, or system to care for neurotrauma patients is overwhelmed.
- 8.4 There is a PIPS review of all neurotrauma patients who are diverted or transferred.
- 8.5 An attending neurosurgeon is present in the ED within 30 minutes of consultation by the surgical trauma team leader for multiple injured patients 24/7 with an 80% achievement rate.
- 8.6 The neurosurgeons that care for trauma patients are board-certified or meet the Alternate Pathway\*.
- 8.7 Qualified neurosurgeons are regularly involved in the care of patients with head and spinal cord injuries and are credentialed by the hospital with general neurosurgical privileges.
- 8.8 Neurosurgeons who take trauma call have documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.

## 9. Clinical Functions: Orthopedic Surgery

- 9.1 Physical and occupational therapists and rehabilitation specialists are available.

9.2 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.3 A mechanism is in place to ensure operating room availability without undue delay for patients with semi urgent orthopedic injuries.
9.4 An orthopedic surgeon is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The orthopedic surgeon attends a minimum of 50% of these meetings.
9.5 Orthopedic team members have dedicated call at their institution and a backup call system.
9.6 An orthopedic team member is present in the ED within 30 minutes of consultation by the surgical trauma team leader for multiple injured patients 24/7 with an 80% achievement rate.
9.7 The design of the backup call system and the responsibility of the orthopedic trauma liaison have been approved by the trauma medical director.
9.8 Provide sufficient resources including instruments, equipment, and personnel for modern musculoskeletal trauma care, with readily available operating rooms for musculoskeletal trauma procedures.
9.9 The PIPS process reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.
9.10 Orthopedic surgeons who care for injured patients are board-certified or meet the Alternate Pathway*.
9.11 The orthopedic surgeon has privileges in general orthopedic surgery.
9.12 Orthopedic surgeons who take trauma call have documented 16 hours annually or 48 hours in 3 years of verifiable, external trauma-related CME and participate in an internal educational process conducted by the trauma program based on the principles of practice-based learning and the PIPS program.
<b>11. Collaborative Clinical Services</b>
<b>Anesthesia</b>
11.1 Anesthesia services are on-site within 30 minutes of notification for emergency operations and airway problems 24/7 with an 80% achievement rate as monitored by the PIPS process.
11.2 An anesthesiologist is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The anesthesiologist attends a minimum of 50% of these meetings.
11.3 When CRNAs are used to fulfill availability requirement, the staff anesthesiologist on call, if available, is (1) advised, (2) promptly available for consult at all times, and (3) present for all operations if requested by the CRNA.
11.4 Anesthesia services are available 24/7 and present for all operations.
11.5 In a center without anesthesia services, there is documentation of the presence of physicians skilled in emergency airway management.
11.6 All anesthesiologists taking call have successfully completed a residency program.
<b>Operating Room</b>
11.7 There is a protocol for providing additional staff for a second operating room when the first operating room is occupied.
11.8 The operating room is adequately staffed and readily available.
11.9 The PIPS program evaluates operating room availability and delays when an on-call team is used.
11.10 The operating room has the essential equipment listed in Chapter 11 of <i>Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006</i> .
11.11 Trauma centers have the necessary equipment for a craniotomy.



<b>Post anesthesia Care Unit (PACU)</b>
11.12 The PACU has qualified nurses available 24/7 as needed during the patient's post anesthesia recovery phase.
11.13 If the PACU is covered by a call team, there is documentation by the PIPS program that nurses are available and delays are not occurring.
11.14 The PACU has the necessary equipment to monitor and resuscitate patients.
<b>Radiology</b>
11.16 The center has staff available on-site or via telemedicine within 45 minutes of notification for the interpretation of radiographs 24/7 with an 80% achievement rate.
11.17 The center has staff available on-site within 30 minutes of notification for the performance of complex imaging studies or interventional procedures 24/7 with an 80% achievement rate.
11.18 Diagnostic information is communicated in a written form and in a timely manner.
11.19 Critical information is verbally communicated to the trauma team.
11.20 Final reports accurately reflect communications, including changes between preliminary and final interpretations.
11.21 Changes in interpretation are monitored by the PIPS program.
11.22 A radiologist is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The radiologist attends a minimum of 50% of these meetings.
11.23 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transport to and while in the radiology department.
11.24 Conventional radiography and CT are available 24/7.
11.25 If there is not an in-house CT technologist, the PIPS program documents response time.
11.26 Conventional catheter angiography and sonography are available 24/7.
<b>Critical Care</b>
11.27 The trauma center has a surgical director or co-director for the ICU who is responsible for setting policies and administration related to trauma ICU patients.
11.28 The trauma surgeon remains in charge of patients in the ICU.
11.29 Physician coverage of critically ill trauma patients is available 24/7.
11.30 Physicians covering critically ill trauma patients respond rapidly to urgent problems as they arise.
11.31 The trauma service retains responsibility for patients and coordinates all therapeutic decisions.
11.32 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
11.33 Coverage of emergencies in the ICU leaves that ED with appropriate physician coverage.
11.34 A qualified nurse is available 24/7 to provide care during the ICU phase.
11.35 The patient:nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
11.36 The ICU has the necessary equipment to monitor and resuscitate patients.
11.37 Intracranial pressure monitoring equipment is available.
<b>Other Surgical Specialists</b>
11.38 The Level II Center has the following surgical specialists: orthopedic surgery, neurosurgery, cardiac surgery, thoracic surgery, hand surgery, microvascular surgery, plastic surgery, obstetric and gynecological surgery, ophthalmology, otolaryngology, and urology.
<b>Medical Consultants</b>
11.39 Specialists from internal medicine and pulmonary medicine are available on staff.



11.40 Specialty consultations for problems related to internal medicine, pulmonary medicine, cardiology, gastroenterology, and infectious disease are available.
11.41 A respiratory therapist is available to care for trauma patients 24/7.
11.42 The center has either dialysis capabilities or a transfer agreement with a facility that has dialysis capabilities.
11.43 Nutrition support services are available.
11.44 Laboratory services are available 24/7 for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
11.45 The blood bank is capable of blood typing and cross-matching.
11.46 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.
11.47 The center has the capability for coagulation studies, blood gases, and microbiology.
<b>12. Rehabilitation</b>
12.1 The hospital has either rehabilitation services within its facility or a transfer agreement to a freestanding rehabilitation hospital.
12.2 The hospital has physical therapy services.
12.3 The hospital has social services.
12.4 The hospital has occupational therapy services.
12.5 The hospital has speech therapy services.
12.6 Rehabilitation consulting services, occupational therapy, speech therapy, physical therapy, and social services are available during the acute phase of care.
<b>15. Trauma Registry</b>
15.1 Trauma registry data are collected, analyzed, and used to support the PIPS program.
15.2 Data are submitted to the Idaho TSE Registry. At least 80% of trauma cases must be entered into the registry within 180 days of treatment.
15.3 The trauma program ensures that trauma registry confidentiality measures are in place.
15.4 There are strategies for monitoring data validity for the trauma registry.
<b>16. Performance Improvement and Patient Safety (PIPS)</b>
16.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.
16.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
16.3 The process of analysis includes multidisciplinary review.
16.4 The process of analysis occurs at regular intervals to meet the needs of the program.
16.5 The results of analysis define corrective strategies.
16.6 The results of analysis and corrective strategies are documented.
16.7 The trauma program is empowered to address issues that involve multiple disciplines.
16.8 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
16.9 The trauma program has a medical director with the authority and administrative support to lead the program.
16.10 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
16.11 The trauma director has the authority to recommend changes for the trauma team based on performance review.
16.12 Identified problem trends undergo multidisciplinary peer review by the Trauma Program Operational Process Performance Committee.



16.13 The trauma center is able to separately identify the trauma patient population for review.
16.14 There is a process to address trauma program operational issues.
16.15 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
16.16 In circumstances when attendance is not mandated (noncore members) the trauma medical director ensures and documents dissemination of information from the Trauma Program Operational Process Performance Committee.
16.17 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
16.18 Deaths are systematically categorized as preventable, non-preventable, or potentially preventable.
<b>17. Outreach and Education</b>
17.1 The trauma center is engaged in public and professional education.
17.2 The trauma center provides some means of referral and access to trauma center resources.
17.3 The trauma center is involved in injury prevention activities, including annual public education activities.
17.4 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.
<b>18. Prevention</b>
18.1 The trauma center participates in injury prevention.
18.2 The trauma center has a prevention coordinator with a demonstrated job description and salary support.
18.3 The trauma center bases injury prevention activities on local data.
18.4 The trauma center demonstrates collaboration with or participation in national, regional, or state injury prevention programs.
18.5 The trauma center has the capability to provide intervention or referral for patients identified as problem drinkers.
<b>20. Disaster Planning and Management</b>
20.1 The hospital meets the disaster-related requirements of the Joint Commission.
20.2 A trauma surgeon is a member of the hospital's disaster committee.
20.3 Hospital drills that test the hospital's disaster plan are conducted at least every six months.
20.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.
<b>21. Organ Procurement Activities</b>
21.1 The trauma center has an established relationship with a recognized organ procurement organization (OPO).
21.2 There are written policies for triggering notification of the OPO.
21.3 The PIPS process reviews the organ donation rate.
21.4 The center has written protocols for declaration of brain death.

\*Specific requirements to satisfy “Alternate Pathway” can be found in *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*.

## Designation Criteria for Level III Trauma Center

Criteria for designation of Level III Trauma Centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*. Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level III Trauma Center in Idaho.

Criteria Element
<b>1. Trauma Systems</b>
1.1 There is sufficient involvement by the hospital trauma program staff in state and regional trauma system planning, development, and operation.
<b>2. Description of Trauma Centers and Their Roles in a Trauma System</b>
2.1 All trauma facilities are on the same campus.
2.2 The trauma director has the responsibility and authority to determine each general surgeon's ability to participate on the trauma team through the trauma Performance Improvement and Patient Safety (PIPS) program and hospital policy.
2.3 The trauma surgeon is on site in the Emergency Department (ED) within 30 minutes of notification 24/7 with an achievement rate of 80% as monitored by the PIPS program.
2.4 The center has general surgical coverage 24/7.
2.5 The trauma team's surgeons respond promptly to activations, remain knowledgeable in trauma care principles whether treating locally or transferring to a center with more resources, and participate in PIPS activities.
2.6 The center has well-defined transfer protocols.
2.7 Trauma surgeons in adult trauma centers that treat more than 100 injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.
2.8 The adult trauma center that treats more than 100 injured children annually has a pediatric ED area, a pediatric intensive care area, appropriate resuscitation equipment, and pediatric-specific trauma PIPS program.
2.9 The adult trauma center that treats children reviews the care of injured children through the PIPS program.
<b>3. Prehospital Trauma Care</b>
3.1 The trauma director is involved in the development of the trauma center's bypass protocol.
3.2 The trauma surgeon on call is involved in the decisions regarding bypass.
3.3 The trauma program participates in prehospital care protocol development and the PIPS program.
<b>4. Interhospital Transfer</b>
4.1 A protocol for direct physician-to-physician contact is present for arranging patient transfer.
4.2 The decision to transfer an injured patient to a specialty care facility in an acute situation is based solely on the needs of the patient.
4.3 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.
<b>5. Hospital Organization and the Trauma Program</b>
5.1 The Trauma Program Operational Process Performance Committee continuously evaluates its process and outcomes to ensure optimal and timely care.



5.2 The trauma medical director is a board-certified surgeon or an American College of Surgeons (ACS) Fellow.
5.3 The trauma medical director participates in trauma call.
5.4 The trauma medical director is current in Advanced Trauma Life Support (ATLS).
5.5 The trauma medical director has the authority to correct deficiencies in trauma care or to exclude from trauma call any trauma team members who do not meet specified criteria.
5.6 The criteria for graded activation is clearly defined by the trauma center and continuously evaluated by the PIPS program.
5.7 Programs that admit more than 10% of injured patients to nonsurgical services demonstrate the appropriateness of that practice through the PIPS process.
5.8 The structure of the trauma program allows the trauma medical director to have oversight and authority for care of injured patients who may be admitted to individual surgeons.
5.9 There is a method to identify injured patients, monitor the provision of health care services, make periodic rounds, and hold formal and informal discussions with individual practitioners.
5.10 There is a Trauma Program Operational Process Performance Committee chaired by the trauma medical director or designee, with representatives from appropriate subspecialty services.
5.11 The general surgery core group is adequately defined by the trauma medical director.
5.12 The general surgery core group takes at least 60% of the total trauma call hours each month.
5.13 The general surgery core group attends a minimum of 50% of the Trauma Program Operational Process Performance Committee meetings.
5.14 The trauma director ensures and documents dissemination of information and findings from the Trauma Program Operational Process Performance Committee meetings to the noncore surgeons on the trauma team.
<b>6. Clinical Functions: General Surgery</b>
6.1 The trauma medical director has the responsibility and authority to ensure compliance with verification requirements.
6.2 The trauma surgeon has privileges in general surgery.
6.3 The trauma surgeon is present in the ED within 30 minutes of notification 24/7 with an 80% achievement rate as monitored by the PIPS program.
6.4 The criteria for the highest level of activation is clearly defined and evaluated by the PIPS program.
6.5 A mechanism for documenting trauma surgeon presence in the operating room for all trauma operations is in place.
6.6 There is a Trauma Program Operational Process Performance Committee with participation from general surgery, orthopedic surgery, neurosurgery, emergency medicine, and anesthesia.
6.7 All general surgeons on the trauma team have successfully completed the ATLS course at least once.
<b>7. Clinical Functions: Emergency Medicine</b>
7.1 The ED has a designated emergency physician director supported by an appropriate number of additional physicians to ensure immediate care for injured patients.
7.2 Emergency physicians cover in-house emergencies with a PIPS process demonstrating the efficacy of this practice.
7.3 In facilities that have an emergency medicine residency training program, supervision is provided by an in-house attending emergency physician 24/7.
7.4 The roles of emergency physicians and trauma surgeons are defined, agreed on, and approved by the trauma medical director.
7.5 A representative from the ED participates in the prehospital PIPS program.
7.6 A designated emergency physician is available to the trauma medical director for PIPS issues that occur in the ED.





7.7 An emergency physician participates in the trauma PIPS program and the Trauma Program Operational Process Performance Committee.
7.8 The emergency medicine representative or designee to the Trauma Program Operational Process Performance Committee attends a minimum of 50% of these meetings.
7.9 All emergency physicians have successfully completed the ATLS course at least once.
7.10 Physicians who are not board-certified in emergency medicine who work in the ED are current in ATLS.
<b>8. Clinical Functions: Neurosurgery</b>
8.1 There is a plan, approved by the trauma medical director, that determines appropriate transfer of patients with neurologic injury when no neurosurgical coverage is present.
8.2 There is a performance improvement program that demonstrates appropriate care in the facility that treats neurotrauma patients.
8.3 There are transfer protocols in place with appropriate Level I and II Trauma Centers.
<b>9. Clinical Functions: Orthopedic Surgery</b>
9.1 Operating rooms are promptly available to allow for emergency operations on musculoskeletal injuries, such as open fracture debridement and stabilization and compartment decompression.
9.2 An orthopedic surgeon is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The orthopedic surgeon attends a minimum of 50% of these meetings.
9.3 The PIPS process reviews the appropriateness of the decision to transfer or retain major orthopedic trauma.
9.4 An orthopedic team member is present in the ED within 30 minutes of consultation by the surgical trauma team leader for multiple injured patients 24/7 with an 80% achievement rate.
9.5 The orthopedic surgeon has privileges in general orthopedic surgery.
<b>11. Collaborative Clinical Services</b>
<b>Anesthesia</b>
11.1 Anesthesia services are on-site within 30 minutes of notification for emergency operations and airway problems 24/7 with an 80% achievement rate as monitored by the PIPS process.
11.2 An anesthesiologist is designated to and participates in the PIPS program and Trauma Program Operational Process Performance Committee. The anesthesiologist attends a minimum of 50% of these meetings.
11.3 Anesthesia services are available 24/7 and present for all operations.
11.4 In trauma centers without in-house anesthesia services, protocols are in place to ensure the timely arrival at the bedside of the anesthesia provider.
11.5 In a center without anesthesia services, there is documentation of the presence of physicians skilled in emergency airway management.
<b>Operating Room</b>
11.6 The operating room is adequately staffed and readily available.
11.7 The PIPS program evaluates the operating room availability and delays when an on-call team is used.
11.8 The operating room has the essential equipment listed in Chapter 11 of <i>Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006</i> .
<b>Post anesthesia Care Unit (PACU)</b>
11.9 The PACU has qualified nurses available 24/7 as needed during the patient's post anesthesia recovery phase.



11.10 If the PACU is covered by a call team, there is documentation by the PIPS program that nurses are available and delays are not occurring.
11.11 The PACU has the necessary equipment to monitor and resuscitate patients.
11.12 The PIPS process ensures that the PACU has the necessary equipment to monitor and resuscitate patients.
<b>Radiology</b>
11.13 The center has staff available on-site or via telemedicine within 30 minutes of notification for the interpretation of radiographs 24/7 with an 80% achievement rate.
11.14 Diagnostic information is communicated in a written form and in a timely manner.
11.15 Critical information is verbally communicated to the trauma team.
11.16 Final reports accurately reflect communications, including changes between preliminary and final interpretations.
11.17 Changes in interpretation are monitored by the PIPS program.
11.18 The trauma center has policies designed to ensure that trauma patients who may require resuscitation and monitoring are accompanied by appropriately trained providers during transport to and while in the radiology department.
11.19 Conventional radiography and CT are available 24/7.
11.20 If there is not an in-house CT technologist, the PIPS program documents response time.
<b>Critical Care</b>
11.21 The trauma center has a surgical director or co-director for the ICU who is responsible for setting policies and administration related to trauma ICU patients.
11.22 The trauma surgeon remains in charge of patients in the ICU.
11.23 When the patient is critically ill, there is a mechanism in place to provide prompt availability of ICU physician coverage 24/7.
11.24 The surgical director or surgical co-director is a surgeon, is credentialed by the hospital to care for ICU patients, and participates in the PIPS program.
11.25 The trauma service retains responsibility for patients and coordinates all therapeutic decisions.
11.26 The trauma surgeon is kept informed of and concurs with major therapeutic and management decisions made by the ICU team.
11.27 Coverage of emergencies in the ICU leaves that ED with appropriate physician coverage.
11.28 The PIPS program reviews admissions and transfers to ensure appropriateness.
11.29 A qualified nurse is available 24/7 to provide care during the ICU phase.
11.30 The patient:nurse ratio does not exceed 2:1 for critically ill patients in the ICU.
11.31 The ICU has the necessary equipment to monitor and resuscitate patients.
11.32 There is intracranial pressure monitoring equipment in a center that admits neurotrauma patients.
<b>Other Surgical Specialists</b>
11.33 The center has orthopedic surgery available.
<b>Medical Consultants</b>
11.34 Internal medicine specialists are available.
11.35 There is a respiratory therapist available or on call 24/7.
11.36 Laboratory services are available 24/7 for the standard analysis of blood, urine, and other body fluids, including microsampling when appropriate.
11.37 The blood bank is capable of blood typing and cross-matching.
11.38 The blood bank has an adequate amount of red blood cells, fresh frozen plasma, platelets, cryoprecipitate, or appropriate coagulation factors to meet the needs of injured patients.



11.39 The center has the capability for coagulation studies, blood gases, and microbiology.
<b>11. Rehabilitation</b>
12.1 The hospital has physical therapy services.
12.2 The hospital has social services.
<b>15. Trauma Registry</b>
15.1 Trauma registry data are collected, analyzed, and used to support the PIPS program.
15.2 Data are submitted to the Idaho TSE Registry. At least 80% of trauma cases must be entered into the registry within 180 days of treatment.
15.3 The trauma program ensures that trauma registry confidentiality measures are in place.
15.4 There are strategies for monitoring data validity for the trauma registry.
<b>16. Performance Improvement and Patient Safety (PIPS)</b>
16.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population.
16.2 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.
16.3 The process of analysis includes multidisciplinary review.
16.4 The process of analysis occurs at regular intervals to meet the needs of the program.
16.5 The results of analysis define corrective strategies.
16.6 The results of analysis and corrective strategies are documented.
16.7 The trauma program is empowered to address issues that involve multiple disciplines.
16.8 The trauma program has adequate administrative support and defined lines of authority that ensure comprehensive evaluation of all aspects of trauma care.
16.9 The trauma program has a medical director with the authority and administrative support to lead the program.
16.10 The trauma medical director has sufficient authority to set qualifications for the trauma service members.
16.11 The trauma director has the authority to recommend changes for the trauma team based on performance review.
16.12 Identified problem trends undergo multidisciplinary peer review by the Trauma Program Operational Process Performance Committee.
16.13 The trauma center is able to separately identify the trauma patient population for review.
16.14 There is a process to address trauma program operational issues.
16.15 There is documentation reflecting the review of operational issues and, when appropriate, the analysis and proposed corrective actions.
16.16 In circumstances when attendance is not mandated (noncore members), the trauma medical director ensures and documents dissemination of information from the Trauma Program Operational Process Performance Committee.
16.17 Evidence of appropriate participation and acceptable attendance is documented in the PIPS process.
16.18 Deaths are systematically categorized as preventable, non-preventable, or potentially preventable.
<b>17. Outreach and Education</b>
17.1 The trauma center is engaged in public and professional education.
17.2 The trauma center is involved in injury prevention activities, including annual public education activities.
17.3 The hospital provides a mechanism for trauma-related education for nurses involved in trauma care.



## **18. Prevention**

18.1 The trauma center participates in injury prevention.

## **20. Disaster Planning and Management**

19.1 The hospital meets the disaster-related requirements of the Joint Commission.

20.2 A trauma surgeon is a member of the hospital's disaster committee.

20.3 Hospital drills that test the individual hospital's disaster plan are conducted at least every six months.

20.4 The trauma center has a hospital disaster plan described in the hospital disaster manual.

## **21. Organ Procurement Activities**

21.1 The trauma center has an established relationship with a recognized organ procurement organization (OPO).

21.2 There are written policies for triggering notification of the OPO.

21.3 The PIPS process reviews the organ donation rate.

21.4 The center has written protocols for declaration of brain death.

## Level IV Trauma Center

# Designation Criteria for Level IV Trauma Center

Criteria for designation of Level IV Trauma Centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*. Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level IV Trauma Center in Idaho.

Type I criteria must be in place at the time of the verification site visit to achieve verification. Type II criteria are also required but are less critical. If three or fewer Type II deficiencies are present at the time of the site visit and no Type I criteria are cited, a 1-year certificate of verification is issued. During the ensuing 12 months, if the trauma center successfully corrects the deficiencies, the period of verification will be extended to 3 years from the date of the initial verification visit.

If any Type I deficiency or more than three Type II deficiencies are present at the time of the initial verification site visit, the hospital will not be verified.

Criteria Element	Type
<b>1. Trauma Systems</b>	
1.1 The center is involved in state and regional trauma system planning, development, and operation. This is essential for all designated trauma centers and participating acute care facilities within a region.	I
1.2 The individual trauma centers and their health care providers are essential system resources that must be active and engaged participants.	I
<b>2. Description of Trauma Centers and Their Roles in a Trauma System</b>	
2.1 The center has a trauma medical director who is trained, experienced, and committed to the care of the trauma patient.	I
2.2 The trauma medical director is responsible for developing and directing the quality improvement program.	I
2.3 The trauma medical director is accountable for all trauma care and exercises administrative authority for the trauma program.	I
2.4 The trauma medical director is given administrative support for implementation of requirements as outlined in this document.	I
2.5 The trauma medical director maintains personal involvement in patient care, staff education, and professional organizations.	I
2.6 The trauma center must have a Performance Improvement and Patient Safety (PIPS) program to ensure optimal care and continuous improvement of care.	I
2.7 Trauma centers must be able to provide the necessary human and physical resources to properly administer acute care consistent with Level IV verification.	I
2.8 The physician or midlevel provider will be in the Emergency Department (ED) on patient arrival for the highest level of activation, provided there is adequate notification from the prehospital providers. The maximum acceptable response time is 30 minutes from patient arrival in the ED. The PIPS program must demonstrate that the provider's presence is in compliance at least 80% of the time.	I
2.9 Well-defined transfer plans are in place.	I
2.10 The center must have emergency coverage by a physician or midlevel provider 24/7.	I



2.11 The ED must be adequately staffed and capable of performing resuscitation 24/7.	I
2.12 ED providers must have completed Advanced Trauma Life Support (ATLS) at least once.	II
2.13 The Trauma Program Operational Process Performance Committee must meet regularly, with required attendance of medical staff active in trauma resuscitation, to review systemic and care provider issues, as well as propose improvements to the care of the injured.	I
2.14 The PIPS program must have audit filters to review and improve pediatric and adult patient care.	II
2.15 Collaborative treatment and transfer guidelines reflecting the center’s capabilities must be developed and regularly reviewed with input from higher-level trauma centers in the region.	II
2.16 The center must actively participate in Regional Time Sensitive Emergency Committee meetings.	I
2.17 The center must be the local trauma authority and assume the responsibility for providing training for prehospital and hospital-based providers.	II
2.18 The facility must participate in regional disaster management plans and exercises.	II
<b>3. Prehospital Trauma Care</b>	
3.1 The center is involved in the development of protocols that guide prehospital trauma care.	II
3.2 The center must have a system to notify dispatch and EMS agencies when on divert status. The center must do the following:	
a. Prearrange alternative destinations with transfer protocols in place;	II
b. Notify other centers of divert or advisory status;	
c. Maintain a divert log; and	
d. Subject all divers and advisories to performance improvement procedures.	
<b>4. Interhospital Transfer</b>	
4.1 The center must perform a PIPS review of all transfers.	I
4.2 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.	II
<b>5. Hospital Organization and the Trauma Program</b>	
5.1 The criteria for a graded activation must be clearly defined by the trauma center, with the highest level of activation including the six required criteria listed in Table 1.	II
5.2 Other potential criteria for trauma team activation that have been determined by the trauma program to be included in various levels of trauma activation must be evaluated on an ongoing basis in the PIPS process to determine their positive predictive value in identifying patients who require the resources of the full trauma team.	II
5.3 The trauma team must be fully assembled within 30 minutes of notification or patient arrival (whichever is shorter) with an achievement rate of 80%.	II
5.4 At a minimum, the six criteria listed in Table 1 to be included in the highest level of activation in all trauma centers.	II

<b>Table 1. Minimum Criteria for Full Trauma Team Activation</b>	
• Confirmed blood pressure less than 90 mm Hg at any time in adults and age-specific hypotension in children;	
• Gunshot wounds to the neck, chest, or abdomen or extremities proximal to the elbow/knee;	
• Glasgow Coma Scale score less than 9 with mechanism attributed to trauma;	



• Transfer patients from other hospitals receiving blood to maintain vital signs;
• Intubated patients transferred from the scene, <b>OR</b>
• Patients who have respiratory compromise or are in need of emergent airway;
• Included intubated patients who are transferred from another facility with ongoing respiratory compromise (does not include patients intubated at another facility who are now stable from a respiratory standpoint); and
• Emergency physician's discretion.

## 6. Clinical Functions: General Surgery

6.1 For centers with surgical capabilities, the surgeon must be on-site within 30 minutes of patient arrival with an 80 % achievement rate for highest level activations.	I
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## 11. Collaborative Clinical Services

11.1 Conventional radiology services (non-CT) must be available in all trauma centers 24/7.	I
11.2 If the center has an Intensive Care Unit (ICU), the PIPS program must document that timely and appropriate care and coverage are being provided.	II
11.3 Laboratory services must be available 24/7 for the standard analysis of blood, urine, and other body fluids including microsampling when appropriate.	I
11.4 The blood bank must be capable of blood typing and cross-matching.	I
11.5 The center must have a transfusion protocol developed collaboratively between the trauma service and the blood bank.	I
11.6 Midlevel providers who participate in the initial evaluation of trauma patients must maintain current Advanced Trauma Life Support (ATLS) certification.	II
11.7 The trauma medical director must work with midlevel providers to ensure appropriate orientation, credentialing, and skill maintenance.	II

## 13. Rural Trauma Care

13.1 Transfer guidelines and protocols between facilities must in place and based on the capabilities of rural hospitals and local EMS agencies.	II
13.2 The center's PIPS program must work with receiving facilities to obtain feedback on all transferred patients.	II
13.3 System and process issues (such as documentation and communication), clinical care issues (including identification and treatment of immediate life-threatening injuries), and transfer decisions must be reviewed by the PIPS program.	I

## 15. Trauma Registry

15.1 Trauma registry data are collected, analyzed, and used to support the PIPS program.	
15.2 Data are submitted to the Idaho TSE Registry. At least 80% of trauma cases must be entered into the registry within 180 days of treatment.	II
15.3 The trauma program ensures that trauma registry confidentiality measures are in place.	
15.4 There are strategies for monitoring data validity for the trauma registry.	II

## 16. Performance Improvement and Patient Safety (PIPS)

16.1 The trauma center demonstrates a clearly defined PIPS program for the trauma population. All process and outcome measures must be documented in a written PIPS plan and updated annually.	II
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16.2 Criteria for all levels of trauma team activation (TTA) must be defined and reviewed annually. See table 1 for minimal acceptable criteria.	II
16.3 All TTAs must be categorized by the level of response and quantified by number and percentage, as shown in table 1.	II
16.4 Delays in trauma surgeon response time must be monitored and reviewed for cause of delay and opportunities for improvement. Corrective actions must be documented.	II
16.5 In centers with ICUs, transfers to a higher level of care must be reviewed to determine the rationale for transfer, adverse outcomes, and opportunities for improvement.	II
16.6 The PIPS program is supported by a reliable method of data collection that consistently gathers valid and objective information necessary to identify opportunities for improvement.	II
16.7 All trauma centers must use a risk stratified benchmarking system to measure performance and outcomes.	II
16.8 The trauma program must use clinical practice guidelines, protocols, and algorithms derived from evidence-based validated resources to achieve benchmark goals.	II
16.9 All process and outcome measures must be documented in a written PIPS plan and updated annually.	II
<b>17. Outreach and Education</b>	
17.1 The center must provide annual public and professional education.	II
17.2 All general surgeons, emergency physicians, and midlevel providers on the trauma team must have completed ATLS at least once.	II
<b>18. Prevention</b>	
18.1 The center must have someone in a leadership position that has injury prevention as part of his or her job description.	II
18.2 The center must have an organized and effective approach to injury prevention and must prioritize those efforts based on local trauma registry and epidemiologic data.	II
18.3 The center must screen all trauma patients for alcohol use and provide a brief intervention if appropriate.	II
<b>20. Disaster Planning and Management</b>	
20.1 The trauma center has a hospital disaster plan described in the hospital disaster manual.	II
<b>21. Organ Procurement Activities</b>	
21.1 The center has written protocols for declaration of brain death.	II

Type I criteria must be in place at the time of the verification site visit to achieve verification. Type II criteria are also required but are less critical. If one to three Type II deficiencies are present at the time of the site visit and no Type I criteria are cited, a 1-year certificate of verification is issued. During the ensuing 12 months, if the trauma center successfully corrects the deficiencies, the period of verification will be extended to 3 years from the date of the initial verification visit.

If any Type I deficiency or more than three Type II deficiencies are present at the time of the initial verification site visit, the hospital is not verified.



## Level V Trauma Center

# Designation Criteria for Level V Trauma Center

The following elements must be met for designation as a Level V Trauma Center in Idaho.

E- Essential element for designation.

D- Desired element for designation.

Criteria Element	Type
<b>1. Center Mission</b>	
1.1 Center is a health care facility (as defined in section 10 of the TSE Rules) with the commitment, medical staff, personnel, and training necessary to provide initial care and stabilization of the trauma patient.	E
1.2 Center provides initial resuscitation of the trauma patient and immediate intervention to control hemorrhage and to assure maximum stabilization prior to referral to an appropriate higher level of care.	E
1.3 The decision to transfer an injured patient rests with the attending provider and is based solely on the needs of the patient.	E
1.4 The center works collaboratively with state agencies and other trauma centers to develop transfer protocols and a well-defined transfer sequence.	E
1.5 The center must participate in their Regional Time Sensitive Emergency (TSE) Committee.	E
<b>2. Center Organization</b>	
<b>Trauma Program/Director</b>	
2.1 The trauma medical director is trained, experienced, and committed to the care of the trauma patient.	E
2.2 The trauma medical director is responsible for developing and directing the quality improvement program.	E
2.3 The trauma medical director is accountable for all trauma care and exercises administrative authority for the trauma program.	E
2.4 The trauma medical director is given administrative support for implementation of requirements as outlined in this document.	E
2.5 The trauma medical director maintains personal involvement in patient care, staff education, and professional organizations.	E
2.6 The trauma medical director is current in Advanced Trauma Life Support (ATLS).	E
<b>Trauma Team</b>	
2.7 The center's policy and procedures describe the role of all personnel on the trauma team.	E
2.8 At a minimum, the trauma team consists of:	



a. A physician or midlevel provider; and	D
b. A registered nurse.	E
<b>Trauma Team Qualifications</b>	
2.9 Where midlevel providers (Nurse Practitioners or Physician Assistants) staff the emergency department (ED), there must be documentation of training and knowledge of care for the trauma patient.	E
2.10 Trauma team physicians and midlevel providers are credentialed by the medical staff and governing board.	E
2.11 Trauma team physicians who are not board-certified or board eligible are reviewed by the trauma medical director and credentialed by the medical staff and governing board.	E
2.12 Trauma team members participate in multi-disciplinary trauma committee and the quality improvement process.	E
2.13 The center has written protocols to determine which types of patients are admitted and which are transferred.	E
2.14 Trauma providers must have documentation of training and knowledge of care for the trauma patient.	E
<b>Trauma Program Manager</b>	
2.15 The center has a trauma program manager. The trauma program manager shows evidence of educational preparation and clinical experience caring for injured patients.	E
2.16 The trauma program manager works with the trauma medical director to address the multidisciplinary needs of the trauma program.	E
2.17 The trauma program manager is responsible for the use of trauma registry data for quality improvement and trauma education.	E
2.18 The trauma program manager serves as a liaison to local EMS agencies and accepting centers.	E
<b>3. Clinical Components</b>	
3.1 During hours of operation, the center has a health care provider(s) (MD, DO, FNP, PA) available. The provider must be on-site within 30 minutes of patient arrival with an 80% achievement rate.	E
3.2 The center has a posted list of specialists who are promptly available from inside or outside of the center.	E
<b>4. Center Standards</b>	
4.1 The center is staffed to ensure immediate and appropriate care to trauma patients during hours of operation.	E
4.2 The center has established standards to ensure immediate and appropriate care of the adult and pediatric trauma patient.	E
4.3 The trauma medical director participates in the internal trauma QI process by attending at least 50% of meetings.	E
4.4 The center is staffed by registered nurses during hours of operation at levels necessary to meet the needs of the trauma patient.	E
4.5 The center's registered nursing staff must participate in the internal trauma QI program.	E
<b>5. Clinical Support Services</b>	
5.1 The center has a written policy to delineate the availability of CT services to the trauma patient.	E



<b>Transfer Protocols</b>	
5.2 There are transfer protocols in place with higher level Trauma Centers as well as specialty referral centers (e.g. burn, pediatric, and rehabilitation centers).	E
5.3 There is a feedback loop with higher level Trauma Centers to facilitate a good understanding of patient outcome.	E
5.4 The center must have guidelines addressing which patients (including pediatric patients) should be transferred and the safe transport of those patients.	E
5.5 Trauma centers that refer burn patients to a designated burn center must have in place written transfer protocols with the referral burn center.	D
<b>Performance Improvement (PI)</b>	
5.6 Data are submitted to the Idaho TSE Registry. At least 80% of trauma cases must be entered into the registry within 180 days of treatment.	E
5.7 The center participates in their Regional TSE Committee.	E
5.8 There is evidence that the center supports public education and awareness.	E
5.9 The center has a functioning internal QI process that:	
a. Has clearly stated goals and objectives;	E
b. Develops standards of care;	E
c. Has a process to credential trauma providers;	D
d. Has explicit quality indicators and filters;	E
e. Has a peer review process that includes prehospital providers;	E
f. Has a method for comparing patient outcomes with computed survival probability; and	E
g. Autopsy information on all trauma deaths.	D

## Level I & II Pediatric Trauma Center

### Designation Criteria for Level I and II Pediatric Trauma Center

Criteria for designation of Level I & II pediatric trauma centers are based upon *Resources for Optimal Care of the Injured Patient, COT/American College of Surgeons, 2006*. Criteria to verify the services and systems are in place to ensure optimal care of the trauma patient are defined in that document. The following elements must be met for designation as a Level I or II pediatric trauma center in Idaho.

Criteria Element	Level
10.1 Pediatric trauma centers meet the same resource requirements as adult trauma centers in addition to pediatric resource requirements.	I, II
10.2 A Level I pediatric trauma center annually admits 200 or more injured children younger than 15 years.	I
10.3 A Level II pediatric trauma center annually admits 100 or more injured children younger than 15 years.	II
10.4 A pediatric trauma center has a pediatric trauma program manager or coordinator.	I, II
10.5 A pediatric trauma center has a pediatric trauma registrar.	I, II
10.6 The pediatric trauma program manager or coordinator is dedicated to the pediatric trauma service.	I
10.7 A pediatric trauma center has a pediatric trauma PIPS program.	I, II
10.8 A pediatric trauma center has all of the following programs: pediatric rehabilitation; child life and family support programs; pediatric social work and child protective services; pediatric injury prevention and community outreach programs; and pediatric trauma education programs.	I, II
10.9 A pediatric trauma center has identifiable pediatric trauma research.	I
10.10 A Level I pediatric trauma center has at least two Surgeons, board-certified or board-eligible in pediatric surgery by the American Board of Surgery.	I
10.11 A Level I pediatric trauma center has at least one board-certified or board-eligible orthopedic Surgeon who has had pediatric fellowship training.	I
10.12 A Level I pediatric trauma center has at least one board-certified or board-eligible neurosurgeon who has had pediatric fellowship training.	I
10.13 A Level I pediatric trauma center has at least one additional board-certified or board-eligible orthopedic Surgeon with demonstrated skills and interest in the care of pediatric trauma patients.	I
10.14 A Level I pediatric trauma center has at least one additional board-certified or board-eligible neurosurgeon with demonstrated skills and interest in the care of pediatric trauma patients.	I
10.15 A Level I pediatric trauma center has at least two physicians who are board-certified or board-eligible in pediatric critical care medicine (pediatric or surgical).	I
10.16 A Level I pediatric trauma center has at least two physicians board-certified or board-eligible in pediatric emergency medicine.	I
10.17 Individuals who provide pediatric care in the pediatric ICU are credentialed by the hospital to provide pediatric trauma care in their respective trauma areas.	I, II



10.18 Individuals who provide pediatric care in the pediatric area of the ED are credentialed by the hospital to provide pediatric care in the ED.	I, II
10.19 A Level II pediatric trauma center has at least one surgeon who is board-certified or board-eligible in pediatric surgery.	II
10.20 A Level II pediatric trauma center has at least one additional board-certified or board-eligible orthopedic surgeon with interests and skills in pediatric surgery.	II
10.21 A Level II pediatric trauma center has at least one board-certified or board-eligible neurosurgeon with interests and skills in pediatric surgery.	II
10.22 The pediatric trauma medical director is board-certified or board-eligible in general surgery.	I, II
10.23 The pediatric trauma medical director is board-certified or board-eligible in pediatric surgery.	I
10.24 There are non-pediatric-trained Surgeons serving on the pediatric panel with proper qualifications:	I, II
a. Credentialed by the hospital to provide pediatric trauma care;	
b. Members of the adult trauma panel;	
c. The pediatric trauma medical director has agreed to their having sufficient training and experience in pediatric trauma care; and	
d. Their performance has been reviewed by the pediatric PIPS program.	
10.25 Trauma surgeon attendance in the ED for the highest level of activations is documented to be greater than 80%.	I, II
10.26 There is a mechanism for documenting Surgeon presence in the operating room.	I, II
10.27 The program offers specialty-specific pediatric education for the specialists.	I, II
10.28 There is a pediatric trauma service led by the trauma medical director.	I, II
10.29 All hospitals seeking verification as an adult and pediatric trauma center meet criteria for the verification level sought in each type of center.	I, II
10.30 Trauma Surgeons in adult trauma centers that admit 100 or more injured children annually are credentialed for pediatric trauma care by the hospital's credentialing body.	I, II
10.31 The adult trauma center that admits 100 or more injured children annually has all of the following: a pediatric emergency department area, a pediatric intensive care area, appropriate resuscitation equipment, and a pediatric-specific trauma PIPS program.	I, II
10.32 The adult trauma center that admits fewer than 100 injured children annually reviews care of injured children through the PIPS program.	I, II
10.33 There is a multidisciplinary peer review committee with participation by the trauma medical director or designee and representatives from pediatric/general surgery, orthopedic surgery, neurosurgery, emergency medicine, critical care medicine, and anesthesia that reviews selected deaths, complications, and sentinel events to identify issues and appropriate responses.	I, II
10.34 Attendance by the required representatives to at least 50% of the multidisciplinary peer review meetings is documented.	I, II
10.35 The pediatric trauma medical director and the liaisons from neurosurgery, orthopedic surgery, emergency medicine, and critical care medicine have adequate pediatric trauma CME.	I, II



## Level I Stroke Center (Comprehensive)

Level I Stroke Center (Comprehensive)	
Criteria	
<b>1. Personnel</b>	
1.1	The center has a stroke care coordinator.
1.2	The center has a stroke medical director who is a physician with extensive experience in neurology and cerebrovascular disease.
1.3	The center has an acute stroke team (i.e. the team of physicians and nurses that responds to assess and treat acute stroke), as designated by the stroke center medical director, on-site 24/7 within 15 minutes of activation.
1.4	The center has a defined stroke leadership team that is responsible for education, protocol, QA, program development, outreach education, etc.
1.5	The center has a neurologist available 24/7 who is on-site within 15 minutes of stroke team activation, or who is available via telemedicine within 15 minutes of stroke team activation and on-site within 45 minutes if needed.
1.6	The center has a board-certified vascular neurologist; or the center has an ABPN-certified neurologist who has completed 12 months of formal training in vascular neurology, or who devotes a minimum of 25% of practice time to vascular neurology.
1.7	The center has a vascular surgeon available 24/7 that is on-site within 30 minutes when requested.
1.8	The center has interventional physicians available 24/7 that are on-site within 30 minutes when requested.
1.9	The center has critical care or neurocritical care physicians available 24/7 that are on-site within 30 minutes when requested.
1.10	The center has physical medicine and rehabilitation physicians.
1.11	The center has a neurosurgeon available 24/7 that is on-site within 30 minutes when requested.
1.12	The center has organizational and administrative support.
1.13	The center has clinical emergency department (ED) personnel trained in diagnosing and treating acute stroke on-site 24/7.
<b>2. Training and Education</b>	
2.1	Members of the stroke leadership team have a minimum of 8 hours of annual education on stroke diagnosis and treatment to ensure competence.
2.2	The stroke medical director has a minimum of 4 hours of annual education related to the care of patients with cerebrovascular disease.
2.3	All center staff are educated annually on the signs and symptoms of stroke and the process to activate the stroke team.
2.4	The center provides annual stroke-related education for hospital personnel involved in stroke diagnosis and treatment to ensure competence.
<b>3. Stroke Services</b>	
3.1	The center has neuroradiology services available 24/7.
3.2	The center has diagnostic radiology services available 24/7.
3.3	The center has physical therapy.
3.4	The center has occupational therapy.



3.5 The center has speech therapy.
3.6 The center has staff stroke nurses available 24/7.
3.7 The center has an intensive care unit (ICU) that is available 24/7.
3.8 The center has a CT tech on-site 24/7.
3.9 The center performs CT or MRI within 25 minutes of patient arrival at Level 1 Stroke Center 24/7. 80% achievement rate (excluding transfers with appropriate imaging already completed).
3.10 The center has staff on-site or via telemedicine to read and report CT/MRI within 45 minutes of patient arrival at Level 1 Stroke Center 24/7. 80% achievement rate (excluding transfers with appropriate imaging already completed).
3.11 The center has MRI with diffusion available 24/7.
3.12 The center has MR angiography/MR venography available 24/7.
3.13 The center has CT angiography available 24/7.
3.14 The center has digital subtraction cerebral angiography available 24/7.
3.15 The center has transcranial doppler available 24/7.
3.16 The center has transesophageal echo.
3.17 The center has carotid artery duplex ultrasound imaging.
3.18 The center has EKG and chest x-ray capability 24/7.
3.19 The center has laboratory or point-of-care testing 24/7 with results in 45 minutes or less.
3.20 The center has IV thrombolytic therapy available 24/7.
3.21 The center has IA recanalization capability available 24/7.
3.22 The center can perform carotid endarterectomy 24/7.
3.23 The center can provide surgical treatment of intracranial cerebrovascular disease 24/7.
3.24 The center can provide placement of intracranial pressure transducer 24/7.
3.25 The center can provide placement of ventriculostomy 24/7.
3.26 The center can perform endovascular treatment of intracranial aneurysms/arterial venous malformations 24/7.
3.27 The center can perform endovascular treatment of vasospasm 24/7.
3.28 The center can perform stenting and/or angioplasty of extracranial vessels 24/7 or has a referral protocol in place.
3.29 The center can perform stenting and/or angioplasty of intracranial vessels 24/7 or has a referral protocol in place.
3.30 The stroke unit's clinical staff demonstrates evidence of initial and ongoing training in the care of acute stroke patients. Stroke units may be defined and implemented in a variety of ways. The stroke unit does not have to be a specific enclosed area, but must be a specified unit to which most stroke patients are admitted.
3.31 The center has operating room coverage 24/7 and is ready within 30 minutes of notification with an 80% achievement rate.
3.32 The center has interventional services coverage 24/7 on-site within 30 minutes of notification with an 80% achievement rate.
3.33 The center has post discharge stroke services.
3.34 The center must have written stroke protocols, order sets, procedures, and/or algorithms for assessment and treatment of ischemic and hemorrhagic strokes which include:



a. stroke team activation process;
b. initial diagnostic tests;
c. administration of medication; and
d. swallowing assessment prior to oral intake.
3.35 The center's pharmacy is adequately staffed by qualified personnel to ensure effective medication management services including emergency services available 24/7.
3.36 The center has transfer protocols or guidelines specific to stroke patients; however there should be no reason to transfer stroke patients from a Level I Stroke Center other than in cases of disaster, equipment failure, severe staffing shortage, etc.
3.37 The center coordinates with EMS on stroke care and transport policy and procedures, system activation, training, data collection and quality improvement, and unavailability of services.
3.38 The center provides annual public education on stroke-related topics such as prevention, risk factors, signs and symptoms, and the importance of getting treatment right away and calling 911.
3.39 The center provides stroke education to stroke patients and their caregivers.
<b>4. Minimum Requirements</b>
4.1 The center cares for a minimum of 12 non-traumatic subarachnoid hemorrhage (SAH) patients per year.
4.2 The center performs a minimum of 15 clippings or endovascular procedures per year for aneurysmal disease.
<b>5. Performance Measurement and Quality Improvement</b>
5.1 The center participates in the Idaho TSE Registry. At least 80% of cases are entered into the TSE Registry within 180 days of treatment.
5.2 The center has internal quality improvement (QI) activities related to stroke care. Internal QI means activities to improve quality of care based on process and outcome data from internal or external stroke registries in which the hospital participates.
5.3 The center measures performance on at least two relevant patient care benchmarks each year.
5.4 The center participates in their Regional TSE Committee.



## Level II Stroke Center (Primary)

Level II Stroke Center (Primary)	
Criteria	
<b>1. Personnel</b>	
1.1	The center has a stroke care coordinator.
1.2	The center has a stroke medical director. The medical director must be a physician; a neurologist or neurosurgeon is preferred but not required. The director may oversee more than one center's stroke program within the same hospital system or corporate structure as long as the director is involved in program decision-making at each hospital.
1.3	The center has a defined stroke leadership team. At a minimum, the team consists of a physician and a registered nurse (RN).
1.4	The center has clinical personnel trained in diagnosing and treating acute stroke on-site 24/7.
<b>2. Training and Education</b>	
2.1	Members of the stroke leadership team have a minimum of 8 hours of annual education on stroke diagnosis and treatment to ensure competence.
2.2	The stroke medical director has a minimum of 8 hours of annual education related to the care of patients with cerebrovascular disease.
2.3	Practitioners working on the stroke unit demonstrate evidence of initial and ongoing training in the care of acute stroke patients.
2.4	All center staff are educated annually on the signs and symptoms of stroke and the process to activate the stroke team.
<b>3. Stroke Services</b>	
3.1	The center has a CT tech on-site 24/7.
3.2	The center has a neurologist or physician experienced in cerebrovascular care available on-site or via telemedicine or telephone within 20 minutes of patient's arrival 24/7.
3.3	The center performs CT or MRI within 25 minutes of patient's arrival 24/7 with an 80% achievement rate.
3.4	The center has staff on-site or via telemedicine to read and report CT or MRI results within 45 minutes of patient's arrival 24/7 with an 80% achievement rate.
3.5	The center has EKG and chest x-ray capability 24/7.
3.6	The center has laboratory or point-of-care testing 24/7 with results in 45 minutes or less with an 80% achievement rate.
3.7	The center has FDA-approved IV thrombolytic therapy for stroke available 24/7.
3.8	The center has intracranial and extracranial vascular imaging.
3.9	The center must have written stroke protocols, order sets, procedures, and/or algorithms for assessment and treatment of ischemic and hemorrhagic strokes which include:
	a. stroke protocol activation process;
	b. initial diagnostic tests;
	c. administration of medication; and
	d. swallowing assessment prior to oral intake.
3.10	The center has:



a. an intensive care unit (ICU);
b. physical therapy;
c. occupational therapy; and
d. speech therapy.
3.11 The center's pharmacy is adequately staffed by qualified personnel to ensure effective medication management services including emergency services available 24/7.
3.12 The center has transfer protocols or guidelines that include criteria specific to transferring stroke patients including hemorrhagic stroke patients, stroke patients outside of the IV t-PA treatment window, et cetera.
3.13 The center must have a written transfer protocol with at least one Level I Stroke Center. The transfer protocol must include communication with and feedback from the receiving center.
3.14 The center coordinates with EMS on stroke care and transport policy and procedures, system activation, training, data collection, and quality improvement.
3.15 The center provides annual public education on stroke-related topics such as prevention, risk factors, signs and symptoms, and the importance of getting treatment right away and calling 911.
3.16 The center provides stroke education to stroke patients and their caregivers.
<b>5. Performance Measurement and Quality Improvement</b>
5.1 The center participates in the Idaho TSE Registry. At least 80% of cases are submitted within 180 days of treatment.
5.2 The center has internal quality improvement (QI) activities related to stroke care. Internal QI means activities to improve quality of care based on process and outcome data from internal or external stroke registries in which the hospital participates.
5.3 The center meets the benchmark of door-to-needle time in less than 60 minutes with a 75% achievement rate.
5.4 The center participates in their Regional TSE Committee.

## Level III Stroke Center (Acute Stroke Ready)

Level III Stroke Center (Acute Stroke Ready)
Criteria
<b>1. Personnel</b>
1.1 The center has a stroke care coordinator (may use a system coordinator).
1.2 The center has a stroke medical director (may use a system medical director). The medical director does not need to be board-certified in neurology or neurosurgery, but must have sufficient knowledge of cerebrovascular disease to provide administrative leadership, clinical guidance, and input to the program.
1.3 The center has a defined stroke leadership team. The stroke leadership team is responsible for setting protocol and procedures, for QI/PI, and for setting educational requirements.
<b>2. Training and Education</b>
2.1 Members of the stroke response team have annual education in stroke diagnosis and treatment to ensure competence.
2.2 The stroke medical director receives at least 4 hours annually of education related to the care of stroke patients.
2.3 All center staff are educated annually on the signs and symptoms of stroke and the process to activate the stroke team.
<b>3. Stroke Services</b>
3.1 The center has a CT tech available 24/7.
3.2 The center has a neurologist or physician experienced in cerebrovascular care available 24/7 on-site or via telemedicine or telephone consult within 20 minutes of patient's arrival.
3.3 The center has staff on-site or via telemedicine or telephone to read and report CT results within 45 minutes of patient's arrival 24/7 with an 80% achievement rate.
3.4 The center has EKG and chest x-ray capability 24/7.
3.5 The center has FDA-approved IV thrombolytic therapy for stroke available 24/7.
3.6 The center must have written stroke protocols, order sets, procedures, and/or algorithms for assessment and treatment of ischemic and hemorrhagic strokes which include:
a. stroke protocol activation process;
b. initial diagnostic tests;
c. administration of medication (including consultation with a neurologist or with a Level I or II Stroke Center); and
d. swallowing assessment prior to oral intake.
3.7 The center has transfer protocols that include criteria specific to transferring stroke patients including hemorrhagic stroke patients, stroke patients outside of the IV t-PA treatment window, etc.
3.8 The center must have a written transfer protocol with at least one Level I Stroke Center and one Level II Stroke Center. The transfer protocol must include communication with and feedback from the receiving center.
3.9 The center has laboratory or point-of-care testing 24/7.



3.10 The center coordinates with EMS on stroke care and transport policy and procedures, system activation, training, data collection, and quality improvement.

3.11 The center provides annual public education on stroke-related topics such as prevention, risk factors, signs and symptoms, and the importance of getting treatment right away and calling 911.

3.12 The center provides stroke education to stroke patients and their caregivers.

## **5. Performance Measurement and Quality Improvement**

5.1 Participation in Idaho's TSE Registry. At least 80% of cases are entered into the TSE Registry within 180 days of treatment.

5.2 Door-to-needle time under 60 minutes with a 50% achievement rate.

5.3 The center participates in their Regional TSE Committee.

## Level I STEMI Center (Receiving)

Level I STEMI Center - PCI Capable	
Criteria	
<b>1. Personnel</b>	
1.1	The center has a cardiac care coordinator.
1.2	The center has a defined cardiac care team that responds to cardiac emergencies.
1.3	The center has a cardiac care medical director that is board-certified in cardiology.
1.4	The center has physicians in the emergency department (ED) 24/7 who are board-certified or board-eligible in emergency medicine, or physicians board-certified in a specialty and practicing emergency medicine as their primary practice with special competence in cardiac care.
1.5	The center has an interventional cardiologist on-site within 30 minutes of cardiac care team activation with an achievement rate of 80%.
1.6	The center has cardiac catheterization (cath) lab staff on-site within 30 minutes of cardiac care team activation with an achievement rate of 80%.
<b>2. Training and Education</b>	
2.1	The physicians, midlevel providers, and registered nurses (RNs) on the cardiac care team are current in Advanced Cardiac Life Support (ACLS) or equivalent (or Board-Certified/Board-Eligible (BC/BE) emergency medicine physician).
2.2	All of the center's ED RNs are current in ACLS or equivalent.
2.3	All of the center's ED RNs complete annual education on signs and symptoms of Acute Coronary Syndrome (ACS).
2.4	Interventional cardiologists who perform cardiac catheters must have a minimum of 45 hours of interventional continuing medical education (CME) every three years.
2.5	The cardiac care medical director must have a minimum of 18 hours of cardiac CME every three years.
2.6	The cardiac care coordinator must have a minimum of 18 hours of continuing education in cardiac care every three years.
2.7	RNs on the cardiac care team complete annual education or training in identifying dysrhythmias, symptoms of ACS, and current American Heart Association (AHA) ACS guidelines.
2.8	The center offers tobacco cessation, nutrition, and other heart-healthy education for its employees and the community at least annually.
2.9	The center provides annual public education on cardiovascular disease prevention, the signs and symptoms of heart attack, and the importance of learning CPR and calling 911 in cardiac emergencies.
2.10	The center provides assistance with training and clinical education for EMS in coordination with the EMS Medical Directors, as needed and upon request (e.g. reading ECG for STEMI patients, appropriate activation of the cardiac care team, etc.).
<b>3. Cardiac Services</b>	
3.1	The center has diagnostic and interventional cardiac catheterization available 24/7.
3.2	The center has laboratory or point-of-care testing available 24/7.
3.3	The center's pharmacy is adequately staffed by qualified personnel to ensure effective medication



management services 24/7.
3.4 The center has fibrinolytic therapy available 24/7.
3.5 The center's post cardiopulmonary arrest care protocols are based on current AHA guidelines.
3.6 The center has cardiac surgery or a transfer protocol with cardiac surgery hospital via ground or air to the highest level of care available (preferably critical care).
3.7 The center has an intensive or critical care unit.
3.8 The center has protocols for activating the cardiac care team for patients who arrive via EMS and patients who "walk-in".
3.9 The center has protocols for ACS, STEMI, triage for "walk-ins" presenting with symptoms of ACS, fibrinolytic therapy, initiation of hypothermia, and transfer guidelines.
3.10 The center must have performed a minimum of 36 percutaneous coronary intervention (PCI) procedures for STEMI during the most recent rolling 12-month period.
3.11 The center has written protocols with regional Level II STEMI Center(s) to accept all STEMI referrals.
3.12 The center has a policy for referral to cardiac rehabilitation services.
3.13 The center coordinates with local EMS agencies on cardiac care, transport policies and procedures, training, and quality improvement.
3.14 The center has a no-divert policy for all patients who meet cardiac care team activation criteria and a backup plan for situations when the hospital's cardiac care resources are temporarily unavailable.
<b>4. Performance Measurement and Quality Improvement</b>
4.1 The center must participate in Idaho's TSE Registry. At least 80% of cases are entered into the TSE Registry within 180 days of treatment. Participation in the National Cardiovascular Registry's ACTION Registry-Get with the Guidelines and/or CARES is recommended but not required.
4.2 The center has internal quality improvement (QI) activities related to stroke care. Internal QI means activities to improve quality of care based on process and outcome data from internal or external stroke registries in which the hospital participates.
4.3 The center achieves door-to-balloon time in less than 90 minutes in 85% of cases.
4.4 The center participates in their Regional TSE Committee.

## Level II STEMI Center (Referring)

Level II STEMI Center - Non-PCI	
Criteria	
<b>1. Personnel</b>	
1.1	The center has identified an individual responsible for coordination of cardiac care.
1.2	The center has a defined cardiac care team that responds to cardiac emergencies.
1.3	The center has an Advanced Cardiac Life Support (ACLS)-certified physician who oversees cardiac care.
<b>2. Training and Education</b>	
2.1	The physicians, midlevel providers, and registered nurses (RNs) on the cardiac care team are current in ACLS or equivalent.
2.2	All of the center's emergency department (ED) RNs have current ACLS training or equivalent.
2.3	All center staff completes annual education on the signs and symptoms of Acute Coronary Syndrome (ACS).
2.4	RNs on the cardiac care team complete annual education or training in identifying dysrhythmias, symptoms of ACS, and current American Heart Association (AHA) ACS guidelines.
2.5	The center offers tobacco cessation, nutrition, and other heart-healthy education for its employees and the community at least annually.
2.6	The center provides annual public education on cardiovascular disease prevention, the signs and symptoms of heart attack, and the importance of learning CPR and calling 911 in cardiac emergencies.
2.7	The center provides assistance with training and clinical education for EMS in coordination with the EMS Medical Directors, as needed and upon request (e.g. reading ECG for STEMI patients, appropriate activation of the cardiac care team, etc.).
<b>3. Cardiac Services</b>	
3.1	The center has laboratory or point-of-care testing available 24/7.
3.2	The center's pharmacy is adequately staffed by qualified personnel to ensure effective medication management services 24/7.
3.3	The center has FDA-approved fibrinolytic therapy available 24/7.
3.4	The center's post cardiopulmonary arrest care protocols are based on current AHA guidelines.
3.5	The center provides resuscitation and stabilization of cardiac patients prior to transfer to a higher level of care 24/7.
3.6	The center has protocols for activating the cardiac care team for patients who arrive via EMS and patients who "walk-in".
3.7	The center has protocols for: ACS, STEMI, triage for "walk-ins" presenting with symptoms of ACS, fibrinolytic therapy, initiation of post arrest care based on current AHA guidelines, and transfer guidelines.
3.8	The center has transfer protocol in place for rapid transfer of patients requiring a higher level of care.
3.9	The center coordinates with local EMS agencies on cardiac care, transport policies and procedures, training, and quality improvement.



#### 4. Performance Measurement and Quality Improvement

4.1 The center must participate in Idaho's TSE Registry. At least 80% of cases are entered into the TSE Registry within 180 days of treatment.

4.2 The center has internal quality improvement (QI) activities related to stroke care. Internal QI means activities to improve quality of care based on process and outcome data from internal or external stroke registries in which the hospital participates.

4.3 The center participates in their Regional TSE Committee.